Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures	)	WT Docket No. 05-211
	)	

WRITTEN EX PARTE STATEMENT OF DR. GREGORY ROSE ON BEHALF OF NHMC, *ET AL.* IN SUPPORT OF ANONYMOUS BIDDING

It is a rather elegant empirical confirmation that tacit collusion is a dominant strategy under the open-bid, ascending auction design currently used in FCC spectrum auctions that both major incumbents and advocates for designated entities should object to anonymous/sealed bidding. Indeed, one would expect precisely that insofar as open-bid, ascending auctions are pervious to manipulation by signaling both to secure the objects most desired by major incumbents and to help more marginal bidders to avoid head-to-head confrontations with bidders against whom they cannot realistically hope to compete.

Dr. Peter Cramton's comments on behalf of T-Mobile rehearse the usual arguments about inefficiencies associated with lind/sealed-bid auctions. However, he fails to note the one circumstance in which these potential inefficiencies are outweighed: reduction of entry barriers by a blind/sealed-bid design (Binmore and Klemperer 2002, Klemperer 2002). As this is ***precisely*** the reason for the FCC's creation of the designated entities program, the same logic justifies a blind/sealed-bid auction to materially increases the likelihood that entry for small and minority-owned

businesses would be eased.

Dr. Cramton also fails to discuss the clear theoretical implications of the results of Engelbrecht-Wiggans and Kahn (1999) and Brusco and Lopomo (2002) that tacit collusion by signaling is an inevitable consequence of open-bid, ascending auction design and the evidence of actual explicit and tacit collusion in FCC spectrum auctions and its effects on revenue. This absence is particularly striking, given that he and Jesse Schwartz confirmed this result in their 2002 paper. Dr. Crampton's comments thus fail to address the most pertinent issues.

In addition, I must disagree with the comments existing incumbents and others that open bidding serves the interests of new entrants and minority owners by allowing smaller applicants to "avoid" conflicts with better funded parties (*see e.g.*, *Ex Parte* of MMTC, filed March 15, 2006). This is exactly the case if the only strategy available to bidders with limited resources is to avoid competing against better funded parties. But the entire purpose of both the DE credit and of anonymous/sealed-bid bidding is to create opportunities for new entrants, particularly small businesses and minority entrants, to successfully contest better funded parties for licenses.

Indeed, the information provided by the transparency of open-bid, ascending auctions is an ***incentive*** for less well-funded bidders not to enter the auction at all. Supporters of open-bid, ascending auctions essentially advocate that the only strategy for small business and minority "mice" is to scurry away from the elephantine feet of the incumbents. That approach creates not so much a level playing field as a deserted one.

A decision by the FCC to adopt anonymous/sealed-bid design for the AWS auction takes direct action against what has been the most anti-competitive element of previous spectrum auction design. It reduces barriers to entry and significantly

reduces the tacitly collusive strategies which bidders have adopted in previous auctions. If the identities of all bidders in each round are disclosed after the auction is closed, this design will only partially address the reputational dynamic which underpins preemptive bidding – the reputations of bidders for preemptive and punishing bids can be retrospectively learned and, thus, influence the behavior of bidders in future auctions, but that is already true of bidders in previous auctions and the usefulness of post-facto bidder disclosure for identification of explicit collusion and other irregularities outweighs this limited drawback.

Anonymous/sealed-bid bidding is therefore, in my opinion, more likely to increase entry by new entrants and minority owned businesses, and encourage deployment by minority-owned and small businesses. Minority-owned businesses are often small businesses and new entrants. Because anonymous/sealed-bid auctions will act to increase the likelihood of success by new entrants generally, it is likely to facilitate entry by minority-owned businesses. To the extent minority-owned businesses hold licenses, the advantages that anonymous/sealed-bid auctions confer in conflicts against larger entities in larger markets will assist minority-owned businesses in acquiring licenses in new markets. By contrast, maintaining the existing rules will perpetuate the existing strategy of "avoidance," effectively excluding minority-owned businesses from the largest, most lucrative markets. This continued exclusion will also have negative implications for deployment in minority communities, since the largest DMAs also contain significant minority communities traditionally underserved by existing major carriers.

In conclusion, the comments of Dr. Crampton fail to address the single, most

relevant reason for adopting anonymous/sealed-bid auctions. The Commission should therefore rely upon the conclusion in Dr. Cramton's earlier work (Cramton & Schwartz 2002) rather than this most recent submission on behalf of his client, T-Mobile. To the extent the Commission seeks to facilitate minority ownership and minority access to new technologies and opportunities in accordance with Section 309(j)(3)(B), anonymous/sealed-bid auctions will better advance these goals than open-bid ascending auctions.

References

K. Binmore and P. Klemperer 2002. The Biggest Auction Ever: The Sale of British 3G Telecom Licenses. *The Economic Journal* 112.

Sandro Brusco and Guiseppe Lopomo 2002. Collusion Via Signaling in Simultaneous Ascending Bid Auctions with Heterogeneous Objects, With and Without Complementarities. *Review of Economic Studies* 69:2.

Peter Cramton and Jesse A Schwartz 2002. Collusive Bidding in the FCC Spectrum Auctions. *Contributions to Economic Analysis & Policy* 1:1.

Richard Engelbrecht-Wiggans and Charles M. Kahn 1999. Low Revenue Equilibria in Simultaneous Auctions. Working Paper, University of Illinois.

Paul Klemperer 2002. *The Economic Theory of Auctions.* Cheltenham: Edward Elgar. Part IVA.